



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/700,200

11/03/2003

Jo-Wen Lin

525400-326

4195

25763

7590

02/16/2011

DORSEY & WHITNEY LLP - MINNEAPOLIS

INTELLECTUAL PROPERTY PRACTICE GROUP (MP-23)

ATTENTION: PATENT PROSECUTION DOCKETING DEPARTMENT

50 SOUTH SIXTH STREET, SUITE 1500

MINNEAPOLIS, MN 55402-1498

EXAMINER

SCHILLINGER, ANN M

ART UNIT

PAPER NUMBER

3774

NOTIFICATION DATE

DELIVERY MODE

02/16/2011

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.docket@dorsey.com

weiss.david@dorsey.com

weissdavid@dorsey.foundationip.com

Office Action Summary	Application No. 10/700,200	Applicant(s) LIN, JO-WEN	
	Examiner ANN SCHILLINGER	Art Unit 3774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) 1-20,33 and 34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-32 and 35-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 21-32 and 35-37 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claims have been amended to state that the substantially entirety of said superior and inferior surfaces are for load bearing and made of a load bearing material. There is insufficient support in the Applicant's specification for these limitations.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 21-32 and 35-37 are rejected under 35 U.S.C. 102(b) as being anticipated by Boyle et al. (US Pat. No. 6,277,149). Boyle et al. discloses the following of claim 21: a spinal bone implant comprising: a body (500 or 600) made of bone (col. 2, lines 28-55) and having superior (top) and inferior (bottom) surfaces (Figs. 16-19), the substantially entirety of said superior and inferior surfaces for load bearing against respective adjacent vertebrae defining a disc space therebetween (col. 6, lines 1-22), the body having spaced respective anterior (front)

Art Unit: 3774

and posterior (back) ends defining an anterior-posterior axis, the body having an outer peripheral surface substantially entirely of load bearing material (Figs. 16-19; col. 2, lines 28-55) and an instrument-receiving bore (552, 550 or 652, 650) formed in the outer peripheral surface at the anterior end, the bore extending in the region between the inferior and posterior surfaces (Figs. 16-19), the bore being at least one of inclined at an angle to the anterior-posterior axis or offset relative to the anterior-posterior axis, and the bore having a diameter and a length wherein the diameter and the length substantially match a diameter and length of an implant engaging portion of an implant insertion instrument such that force from the implant insertion instrument is displaced over a relatively wide area of the bore (Figs. 16-19; col. 6, lines 1-22).

Boyle et al. discloses claim 22 as shown in Figures 16-19.

Boyle et al. discloses the following of claim 23: the implant of claim 21 wherein the implant has a central opening in communication with said inferior and superior surfaces, the bore being blind and extending in a direction parallel to the inferior and superior surfaces (Figs. 16-19).

Boyle et al. discloses claim 24 as shown in Figures 16-19.

Boyle et al. discloses the following of claim 25: the implant of claim 21 wherein the implant has a central opening in communication with said inferior and superior surfaces, the bore being in communication with the anterior end surface and the central opening (Figs. 16-19).

Boyle et al. discloses the following of claim 26: the implant of claim 21 wherein the implant has an outer peripheral wall surface, the outer peripheral wall surface having a curved

Art Unit: 3774

portion and a flat portion, the flat portion being located on said axis at said anterior end of the implant (Figs. 16-19).

Boyle et al. discloses claims 27-29 as shown in Figures 1 and 2.

Boyle et al. discloses the following of claim 30: the implant of claim 21 wherein at least one of the inferior and superior surfaces are roughened (528) to minimize backing out of the implant from between the vertebrae and at least one of the inferior and superior surfaces is inclined relative to the axis.

Boyle et al. discloses the following of claim 31: the implant of claim 21 wherein the body is made of a section of the diaphysis of a long bone (col. 2, lines 28-55).

Boyle et al. discloses the following of claim 32: the implant of claim 21 wherein the body is cortical bone (col. 2, lines 28-55).

Boyle et al. discloses the following of claim 35: the implant of claim 21 wherein the body comprises a slice of cortical bone taken from the diaphysis of a long bone (col. 2, lines 28-55).

Boyle et al. discloses the following of claim 36: a spinal bone implant comprising: a body (500 or 600) made of bone (col. 2, lines 28-55) and having superior and inferior surfaces the substantial entirety of said superior (top or 522) and inferior (bottom or 524) surfaces for load bearing against respective adjacent vertebrae defining a disc space therebetween (Figs. 16-19; col. 6, lines 1-22), the body defining a plane and having spaced respective anterior (front) and posterior (back) ends defining an anterior-posterior axis in the plane, the body having a central

Art Unit: 3774

opening (Figs. 16-19) in communication with the inferior and superior surfaces, the body having a curved outer peripheral surface (col. 6, lines 1-22) substantially entirely of loading bearing material (col. 2, lines 28-55) and an instrument-receiving bore (552, 550 or 652, 650) formed in the outer peripheral surface at the anterior end, the bore extending in the region between the inferior and superior surfaces, the bore being at least one of inclined at an angle to the anterior-posterior axis or offset relative to the anterior-posterior axis, and the bore having a diameter and a length wherein the diameter and the length substantially match a diameter and length of an implant engaging portion of an implant insertion instrument such that force from the implant insertion instrument is displaced over a relatively wide area of the bore (Figs. 16-19; col. 6, lines 1-22).

Boyle et al. discloses the following of claim 37: a spinal bone implant comprising: a body (500 or 600) made of cortical bone (col. 2, lines 28-55) formed from a traverse section slice taken from the diaphysis of a long bone (col. 2, lines 28-55) and having superior (top or 522) and inferior (bottom or 524) surfaces for bearing against respective adjacent vertebrae defining a disc space therebetween (Figs. 16-19; col. 6, lines 1-22), the body defining a plane and having spaced respective anterior (front) and posterior (back) ends defining an anterior-posterior axis in the plane, the body having an outer peripheral surface substantially entirely of load bearing material (col. 6, lines 1-22; Figs. 16-19) and an instrument-receiving bore (552, 550 or 652, 650) formed in the outer peripheral surface at the anterior end, the bore extending in the region between the inferior and superior surfaces, the bore being at least one of inclined at an angle to the anterior-posterior axis or offset relative to the anterior-posterior axis, and the bore having a diameter and a length wherein the diameter and the length substantially match a

Art Unit: 3774

diameter and length of an implant engaging portion of an implant insertion instrument such that force from the implant insertion instrument is displaced over a relatively wide area of the bore (Figs. 16-19; col. 6, lines 1-22).

Response to Arguments

In view of the amendments submitted 7/6/2010, the previously applied 35 U.S.C. 112 rejections of claims 21 and 37 are withdrawn.

Applicant's arguments with respect to claims 1-32 and 35-37 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANN SCHILLINGER whose telephone number is (571)272-6652. The examiner can normally be reached on Mon. thru Fri. 9 a.m. to 4 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Isabella can be reached on (571) 272-4749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3774

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DAVID ISABELLA/
Supervisory Patent Examiner, Art Unit
3774

/A. S./
Examiner, Art Unit 3774